

Baker describes a data analysis system and method for industrial process control systems. Baker discloses storing data obtained from a multiplicity of distinct predefined processes (Abstract, lines 1-3). Baker further discloses defining data analysis charts which depict measurement data for a specified process and defining chart groups comprising a set of data analysis charts (Abstract, lines 3-5). Fig. 4 of Baker is a depiction of one such data analysis chart known as a trend chart. Fig. 4 of Baker shows a trend chart 50 and a "C.D.F." (Cabinet, Drawer, Folder) chart selection menu 60 at the top of the display, which is used to select the trend chart to be displayed (Col. 6, lines 22-24). Fig. 6 of shows a trend chart with a wafer map superimposed on top (Col. 6, line 67-Col. 7, line 2). Fig. 6 of Baker also shows the chart selection menu 60 at the top of the display.

Claim 1 of the present application is directed to a method for displaying process information in a process control and/or monitoring system. Claim 1 requires "generating and displaying on the display screen an event table containing information describing process events that are related to the selected process parameters and that occurred during the selected time window." By contrast, Baker discloses displaying a trend chart containing measurement data for predetermined processes along with a C.D.F. The C.D.F. is a menu containing a list of trend charts that can be displayed. Selecting a particular trend chart from the C.D.F. will cause that trend chart to be displayed in place of the currently displayed trend chart. This is very different from an event table containing information describing process events that are related to the selected process parameters and that occurred during the selected time window of the trend chart, as claimed. Baker fails to disclose or suggest displaying an event table containing information describing process events, as recited by claim 1. Therefore, claim 1 patentably distinguishes over Baker and is in condition for allowance. Accordingly, it is respectfully requested that the rejection of claim 1 under 35 U.S.C. §102(e) be withdrawn.

Claims 3-8 depend from claim 1 and are patentable for at least the same reasons discussed above in connection with claim 1. Accordingly, it is respectfully requested that the rejection of claims 3-8 under 35 U.S.C. §102(e) be withdrawn.

Claim 9 of the present application is directed to a process control and/or monitoring system. Claim 9 requires a display screen with means for "generating and displaying on the display screen an event table containing information describing process events that are related to the selected process parameters and that occurred during the selected time window." As

discussed above, Baker discloses displaying a trend chart containing measurement data of certain processes. Baker fails to disclose or suggest means for displaying an event table containing information describing process events, as claimed. Therefore, Claim 9 patentably distinguishes over Baker and is in condition for allowance. Accordingly, it is respectfully requested that the rejection of claim 9 under 35 U.S.C. §102(e) be withdrawn.

Claims 11-13 depend from claim 9 and are patentable for at least the same reasons discussed above in connection with claim 9. Accordingly, it is respectfully requested that the rejection of claims 11-13 under 35 U.S.C. §102(e) be withdrawn.

Claim 14 is directed to a graphical user interface for displaying trend and event data related to the operation of a process. Claim 14 requires “a first display area configured to display at least one trend line representative of at least one parameter associated with the process” and “a second display area configured to display information representative of at least one process event.” As discussed above, Baker discloses a display including a trend chart containing measurement data for a predefined process, a wafer map for a selected item in the trend chart, and a chart selection menu for selecting which trend chart is to be displayed. The wafer map shown by Baker illustrates the resistivity over certain areas of the wafer that was processed. The wafer map contains no information regarding process events. Baker fails to disclose or suggest “a display area configured to display information representative of at least one process event”, as recited by claim 14. Therefore, Claim 14 patentably distinguishes over Baker and is in condition for allowance. Accordingly, it is respectfully requested that the rejection of claim 14 under 35 U.S.C. §102(e) be withdrawn.

Claims 15-16 depend from claim 14 and are patentable for at least the same reasons discussed above in connection with claim 14. Accordingly, it is respectfully requested that the rejection of claims 15-16 under 35 U.S.C. §102(e) be withdrawn.

Claims 17 is directed to a system for monitoring a process. Claim 17 requires “an event database containing event records related to the process” and “means for simultaneously displaying a trend graph representing at least a portion of the historical trend data and a table representing at least a portion of the event records.” As discussed above, Baker fails to disclose or suggest recording event data. Additionally, Baker fails to disclose maintaining an event database. Furthermore, Baker clearly does not disclose simultaneously displaying a trend graph and a table representing at least a portion of the event records. Therefore, claim 17 patentably

distinguishes over Baker. Accordingly, it is respectfully requested that the rejection of claim 17 under 35 U.S.C. §102(e) be withdrawn.

Claims 18, 19, and 22-24 depend from claim 17 and are patentable for at least the same reasons discussed above in connection with claim 17. Accordingly, it is respectfully requested that the rejection of claims 18, 19, and 22-24 under 35 U.S.C. §102(e) be withdrawn.

The Office Action rejected claims 2, 10 and 20 under 35 U.S.C. §103(a) as unpatentable over Baker. Applicants respectfully traverse this rejection.

Claim 2 depends from claim 1 and is patentable for at least the same reasons discussed above in connection with claim 1. Claim 10 depends from claim 9 and is patentable for at least the same reasons discussed above in connection with claim 9. Claim 20 depends from claim 17 and is patentable for at least the same reasons discussed above in connection with claim 17. Accordingly, it is respectfully requested that the rejection of claims 2, 10, and 20 under 35 U.S.C. §103(a) be withdrawn.

The Office Action rejected claim 21 under 35 U.S.C. §103(a) as unpatentable over Baker and further in view of Hanson (EP 0508386, A2). Applicants respectfully traverse this rejection.

Claim 21 depends from claim 17 and is patentable for at least the same reasons discussed above in connection with claim 17. Accordingly, it is respectfully requested that the rejection of claim 21 under 35 U.S.C. §103(a) be withdrawn.

Based on the above discussion, careful reconsideration and allowance of Applicants' claims are respectfully requested. If any issues remain outstanding in this application, the Examiner is requested to telephone Applicants' undersigned attorney.

Respectfully submitted,

Robert B. HAVEKOST et al, Applicants

By William R. McClellan
William R. McClellan, Reg. No. 29,409
WOLF, GREENFIELD & SACKS, P.C.
600 Atlantic Avenue
Boston, MA 02210-2211
Tel. no. (617) 720-3500
Attorneys for Applicant(s)

Attorney's Docket No.: F0467/7006
Dated: October 2, 2001